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ABSTRACT

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SOCIAL GROUPS AS A BASIS FOR ASSESSING PARTICIPATION IN SELECTED WATER ACTIVITIES

by

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ABSTRACT

Traditional activity research has relied upon social aggregate variables like occupation, income, education, age, and marital status, almost entirely as a basis to predict demand for given activities. This is especially true for many studies completed on specific recreational sites where only participants are considered. However, once non-participants have been eliminated from consideration in the analysis, the major source of statistical difference measured by social aggregate variables has been removed resulting in the failure of these variables alone to explain participation. An analysis strategy is proposed in which a social group variable might be employed in conjunction with social aggregate variables to enhance the measurement of participation in leisure activities.

Keywords: Analysis strategy, social group variable, social aggregate variables, demand studies

Social Groups as a Basis for Assessing Participation in Selected Water Activities[1]

Assessing participation in the various water-based activities is a continuous undertaking for social scientists, planners, and administrators of recreational areas. While it has been generally accepted that participation in water-based recreation is on the rise, the nature of participation and by whom, has not been adequately established. Traditional activity research has relied upon social aggregate variables almost entirely. The inability to adequately assess participation in outdoor recreation is partially related to a failure to incorporate a measure of the social unit of participation (i.e., the social group) as one criterion. It may be more important to know how people organize themselves to play rather than to know the activities in which they participate.

Several social scientists have drawn attention to the limitations for assessing participation in outdoor activities by focusing only upon social aggregate variables like occupation, income, age, education or

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place of residence, etc. (Burdge and Field, 1971). An examination of the social and demographic characteristics of participants within specific activities does not provide sufficient information about people and corresponding patterns of leisure behavior (Burch, 1969 and Meyersohn, 1969). While we generally concur, the problem is more a function of the level of analysis rather than necessarily of inappropriate variables. Consequently, distinctions should be made as to how the social aggregate variables are incorporated within an analysis. Alone they fail to be the predicators of participation in leisure activities so eagerly sought. However, when these variables are employed in conjunction with sociological variables, the resulting analysis assumes a different character.

With so many states dependent upon social-demographic characteristics of participants as the primary basis for establishing recreational demand, we suggest this latter approach deserves attention. Our objective is to propose an analysis strategy in which social aggregate variables might be employed in conjunction with a social group variable to measure participation in leisure activities.

Social Groups: A Basis for Leisure Participation

Attempts at analyzing the social group in the context of non-work time are a relatively recent phenomenon. Meyersohn (1969:55) stated:

> Leisure research, like much other social research has been based largely on random samples, in which the connectedness of humans is carefully sampled out.

> ...(L)ittle effort has been made to study groups as such -- family groups, groups engaged in common leisure activities, groups belonging to the same voluntary association.

Burch (1969) suggested that the nature of leisure data collected often led to the treatment of statistical aggregates as though they were social groups, when, in fact, no such relationship could be said to exist. He then suggested several hypotheses which might have the potential for explaining leisure participation, arriving at a "personal community" hypothesis which he hoped would "...permit the study of social groups as well as individuals and social aggregate." (Burch 1969: 126). The hypothesis suggests that one's leisure style will to a large extent be developed through relationships with and socialization by working partners, friends, parents, and one's spouse.

While this analysis suggests how the "boundaries" of an actor's leisure life style might evolve, it remains only speculative as to what happens when the social actor translates style into actual (real) sets of activity. If the relationship with various "others" influences leisure style, does the transmittal of style into action mean that sets of activities become linked to the group of which the social person finds himself a member?

Reference has been made earlier to the interest of assessing the role of social groups in leisure. Several authors have been actively engaged in this analysis. Cheek (1971) proposed an alternative theoretical approach for the investigation of leisure. He suggested that leisure might be treated within the context of the theoretical

negative of work, not-work, utilizing social organization characteristics to distinguish uniqueness between these two sectors. The data presentation suggested that work involved the behavior and actions of the social person, while not-work would exhibit involvement by the social group. Within the context of park going, for example, a significant difference was found to exist between male participation "alone" versus "with others". Over 81 percent of the males interviewed visited a park with someone else, while going to work appeared to be an event more often undertaken alone (77%).

Field (1971) was able to further demonstrate the apparent importance of social groups in the "not-work" or leisure setting. A variety of outdoor leisure settings was examined in relation to "with whom" the interviewed participants (heads of household) engaged in leisure activities. Categories of "alone", "with friends", "family", "family and friends" were established, and it was found that, regardless of leisure setting, participation within a group (with others versus alone) predominated. With the exception of participation in a neighborhood where 30% played alone, a minimum of 90% participated in leisure with others. Among the social group types, the "family" in each of the identified leisure settings emerged as the most common social unit in which leisure participation took place. In addition, families participated in similar leisure activities in various leisure settings. Lee (1972) also suggests that outdoor recreational settings might be better understood in terms of the meanings assigned by various socio-cultural groups.

Yancey and Snell (1971:2-3) investigating leisure activities among lower, working, and middle class blacks and whites living in Nashville,

Tennessee, reinforced the results of other authors when they found that:

> ...leisure activities are social activities. Among all urbanites, and particularly among blacks, they occur in relatively small social groups characterized by relatively high continuity of membership. ...In almost every activity that we investigated...informal groups of family and friends were involved.

When specific activities are considered, the social group is again noted as a key component in differential participation. Burch (1965), using observational techniques, defined a number of play action types within which he identified different activities. A variety of different natural settings were considered, and he suggested that certain play action types would emerge; but perhaps more importantly, he showed that, as the construct of the social group changed, the activities pursued by the distinct groups also varied.

This type of observational finding has been further substantiated in the literature when participation in water activities is considered. Hunting and fishing are the activities most often studied (Sofranko and Nolan (1970), Bevins (1968), Brewer and Gillespie (1966), Green and Wadsworth (1966), Owens (1970)). Participation in hunting and fishing has occurred most often in the presence of others. When, however, the construct of the social group is examined, differences emerge. Hunting is primarily a peer group activity participated in by males. Fishing is also a

group activity, but children and females are more often found in company with a male. Owens has also noted significant differences in participation by sex. Power boating appears to be a male dominated activity, while participation in a category identified as canoeing-rowing-sailing attracts both men and women. These differences found by Owens, further suggest variance in the nature and construct of groups participating in water-based activities.

It is clear that until a social group variable is considered in a systematic fashion within an analysis strategy, activity research will fail as an approach to explain or predict the basis for participation in outdoor recreation. Therefore, our analysis proceeds in the following manner. First, a conceptual system is established whereby social aggregate variables and group variables might be considered together. Next, variables of each system are examined in terms of their ability to explain participation in selected water activities independently and jointly.

Method

The universe for this study includes the adult population 18 years of age and older who reside in Western Washington, Western Oregon, and Northern California. A probability sample of 1,504 residents was selected from our universe for examination. All interviews were conducted by telephone during the months of August and September of 1971.
The major independent variables are: 1) the social group of which the respondent was a member, and 2) compositional features associated with participation as a group represented by selected social and demographic

characteristics. The dependent variable is frequency of participation in a specific activity. A detailed description of the sampling strategy and interviewing technique are described elsewhere (Field, 1972).

Establishing a Conceptual System

Ford and DeJong (1970) have succinctly identified levels of analysis and where two levels of analysis might be bridged within a given analysis. They define a social aggregate as a statistical group sharing a common trait or traits. They identify a social aggregate system as one in which the elements possess one or more common traits, but do not include interpersonal interaction (Ford and DeJong, 1970:10). A social aggregate category, for example, would be all the males 30-39 years of age who hunt waterfowl. As stated previously, most of the leisure activity research has been confined to social aggregate systems.

Another analytical system is, as defined by the authors, the social action system identified accordingly:

> The direct study of social behavior, which is of basic interest to most sociologists, is carried on within a social action system analytical framework. The chief characteristic of social action systems is their inclusion of various forms of interpersonal interaction as basic analytical components. (Ford and DeJong, 1970:8)

The family would be considered a social action system. A friendship group would be considered a social action system. Characteristics of these systems are that members possess statuses as participants of the system, and behavioral expectations articulated within their respective social roles. These are the elements of the system. A number of system processes operate to maintain the social group such as norms and the nature of interpersonal interactions which arise.

It is not the individual systems per se but the points of intersection between systems which offer leisure researchers a new dimension in activity studies. For example, the relationship between occupation, sex, age, or educational attainment (social aggregate system) and the family or friendship group (social action system) when assessing participation in water activities represents a point of intersection indicative of this analysis strategy (Figure 1).

RESULTS

Social Aggregate Variables

We have established previously the argument for considering social aggregate variables in conjunction with a social group variable for measuring differential participation in selected water-based recreational activities. When each of nine social characteristics is considered alone, it fails to explain differences among participants (Table 1). Examined independently, none of the nine social characteristics account for

significant differences in swimming and fishing in fresh water.[2] Only marital status accounts for significant differences among participants in power boating. In this case a higher proportion of married participants engage in this activity. The same is true for visiting a beach where married participants are in greater representation than non-married participants. Only in the case of this latter activity is there more than one characteristic which accounts for significant differences among participants. A direct relationship appears between higher education and increased participation and an inverse relationship between age and frequency of participation. That is, younger participants tend to visit a beach more often than older participants.

Notice the amount of variance explained by each of the social characteristics independently considered for all four activities. With but few exceptions, they account for very little of the variance explained. While a direct translation into percent cannot be made with this statistic, two-thirds of the factors treated individually in swimming are less than .100. In the case of the other three activities a Cramer's V of .100 appears to be average.

Such a finding is logical when the nature of participation is examined closely. In our preliminary analysis, we first compared non-participants with participants in terms of individual social characteristics. Without exception significant differences were

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2. Compositional factors are defined in terms of the social characteristics associated with one member of the group and consequently is a limitation in the present analysis.

noted between them. Traditional variables like educational attainment and income continue to distinguish participants from non-participants Once, however, the non-participants are eliminated from the analysis, the major source for differences has been removed. When attention is devoted to explaining differential participation among participants, social characteristics in and of themselves fail to explain the differences which arise in the frequency of participation. It should be pointed out here that one reason site-specific demand studies fail to explain differential participation among user groups is related to the fact that information is obtained only from participants. Relying solely upon social characteristics treated as aggregate variables compounds the problem. This finding is further substantiated in our analysis.

When considered simultaneously in a multiple correlation analysis, the social characteristics account for very little of the explained variance (Table 2). With the exception of fishing, all the R^2 values are less than .05 which means that approximately five percent of the variation in frequency of participation is accounted for by these variables. With regard to fishing, age, income, and sex, among the nine variables considered, account for the majority of variance explained. Fishing is attractive to younger people, and is male dominated. Females participate less, and when they do participate, they do so as members of a family unit. Similar findings were noted for waterfowl hunting where females were conspicuously absent as participants. Only when viewed in terms of a family unit do we find females participating in any great number.

Social Group Variable

It is not until we add as one criterion, the social group within which participation takes place that we find significant differences emerging. Treated individually there are significant differences between social groups and the frequency with which participation in a specific activity arises (Table 3). Family groups for example are found more often visiting a beach and swimming than in any other activity. Friendship groups predominate in fishing and swimming. Family-friendship groups along with friendship groups are over-represented in power boating.

Joint Effect

When a social group variable and social aggregate variables are treated simultaneously, the amount of variance explained with regard to frequency of participation in a specific activity increases significantly (Table 4). Recall that with the exception of fishing, less than five percent of the variance was explained by social characteristics. In no case in this combined analysis is the amount of variance explained by this new set of variables less than 12 percent and in one case reaches 39 percent. With regard to swimming where less than six percent of the variance was explained by social characteristics, when the group type is added, as much as 23 percent of the variance is explained. Similar increases are noted for each of the activities considered with the exception of fishing. Twenty-six percent of the variance accounting for differential participation in fishing was explained by social characteristics. When group type is a friendship group,

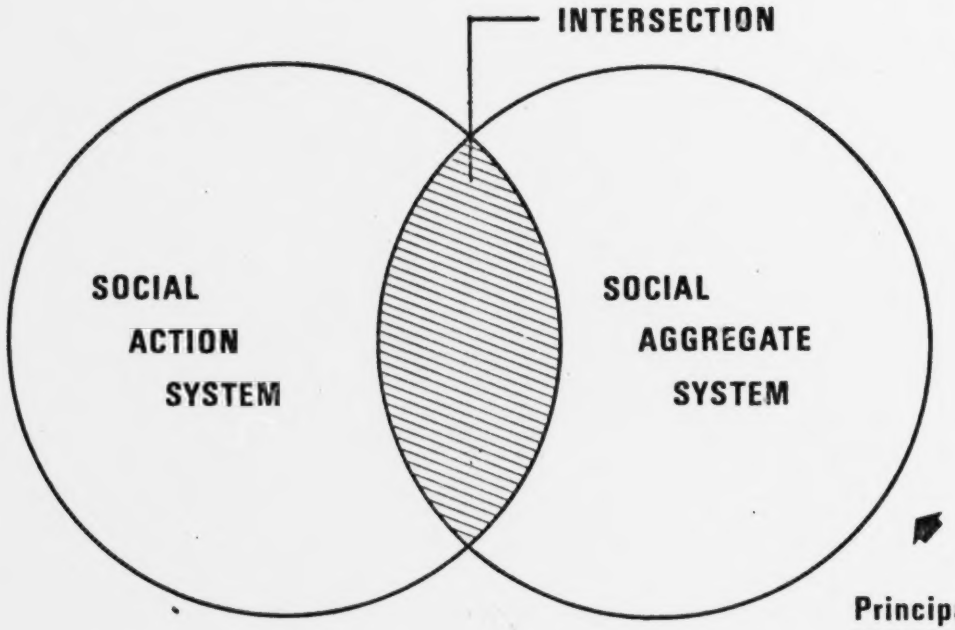
40 percent is now explained. Notice, however, that for any group type the R^2 is reduced. Visiting a beach is one activity which, by adding a social group variable, explanation is most pronounced regardless of group type considered. It appears here that the activity is conducive to participation within a group rather than alone, and this by itself appears to be an important distinction.

Discussion

For years state outdoor recreation plans have attempted to assess or predict demand for outdoor recreation and specifically demand for particular activities. The results of such studies often appear in a format which identifies who the participants are and to what extent they participate now and will participate in the future. While a very popular approach, the conclusions reached about users are often invalid due to an incomplete analysis strategy. The majority of such studies rely upon social characteristics (aggregate variables) as indicators associated with participation and very often these studies are conducted on sites. Alone, the social characteristics of participants fail to be the predictors of participation. Instead, activity profiles which are generated greatly inflate or misrepresent events which are occurring in reality. We have demonstrated here for a limited set of activities that social characteristics of participants do not distinguish among participants as to the frequency with which they participate in a given activity. Preliminary analysis of participants and non-participants

did show significant differences in terms of social characteristics, but when non-participants are eliminated from the analysis, the major source of difference is also removed. When the social group in which participation occurs is added to the analysis, the explanation for differential frequency of participation is enhanced.

Analysis Systems



Principal Elements

- Family Group
- Friendship Group
- Family-Friendship Group

Principal Elements

- Occupation
- Education
- Income
- Sex
- Age
- Marital Status
- Size of Town
- Ages of Family Members
- Size of Family

TABLE 1 Selected Social Characteristics (Aggregate Variables) Considered Independently as Factors Accounting for Differential Participation

Social Characteristic	Swimming at a beach, lake or river (N = 565)		Fishing in fresh water (N = 447)		Power Boating (N = 404)		Visiting a beach (N = 771)	
	Cramer's V	Sign.	Cramer's V	Sign.	Cramer's V	Sign.	Cramer's V	Sign.
Occupation	.110	NS	.141	NS	.102	NS	.115	NS
Education	.111	NS	.115	NS	.122	NS	.110	$p<.05$
Income	.067	NS	.122	NS	.105	NS	.068	NS
Age	.091	NS	.087	NS	.094	NS	.113	$p<.05$
Ages of Family Members	.079	NS	.121	NS	.124	NS	.084	NS
Size of Family	.068	NS	.088	NS	.146	NS	.069	NS
Marital Status	.084	NS	.110	NS	.147	$p<.01$	.139	$p<.001$
Sex	.066	NS	.111	NS	.132	NS	.054	NS
Size of Town	.122	NS	.144	NS	.119	NS	.126	NS

TABLE 2

Multiple Correlation (R^2) of Selected Characteristics for Participants in Four Water-Based Activities

Social Characteristics	Swimming at a beach, lake or river (N = 565)	Fishing in fresh water (N = 447)	Power Boating (N = 404)	Visiting a beach (N = 771)
Nine social characteristics excluding the social group within which participation takes place	R^2=.034	R^2=.261	R^2=.046	R^2=.053

TABLE 3

The Social Group (Social Action Systems Variable) Considered Independently as a Factor Accounting for Differential Participation

Social Action System Variable	Swimming at a beach, lake, or river N = 546		Fishing in fresh water N = 412		Power boating N = 393		Visiting a beach N = 732	
	Cramer's V	Sign.	Cramer's V	Sign.	Cramer's V	Sign.	Cramer's V	Sign.
Social group within which participation takes place	.114	p<.05	.149	p<.01	.119	p<.10	.108	p<.001

TABLE 4

Multiple Correlation (R^2) of Selected Characteristics and Social Group for Participants in Four Water-Based Activities

Nine Social Characteristics including the social group within which participation takes place	Swimming at a beach, lake, or	Fishing in Fresh Water	Power Boating	Visiting a beach
With Friends	N = 101 R^2=.238	N = 101 R^2=.307	N = 81 R^2=.177	N = 108 R^2=.283
With Family	N = 237 R^2=.125	N = 201 R^2=.155	N = 121 R^2=.181	N = 348 R^2=.258
With Family and Friends	N = 212 R^2=.156	N = 135 R^2=.228	N = 141 R^2=.179	N = 134 R^2=.389

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